

1

SEQUENCE LISTING

<110> Pinter, Abraham

<120> HIV-1 gp120 V1/V2 DOMAIN EPITOPEs
CAPABLE OF GENERATING NEUTRALIZING ANTIBODIES

<130> 07763-048001

<140> 09/508,208
<141> 2000-03-08

<150> PCT/US98/18679

<151> 1998-09-08

<150> 60/058,155

<151> 1997-09-08

<160> 30

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 96

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 1

Val Lys Leu Thr Pro Leu Cys Val Thr Leu Asn Cys Ile Asp Leu Arg
1 5 10 15
Asn Ala Thr Asn Ala Thr Ser Asn Ser Asn Thr Thr Asn Thr Thr Ser
20 25 30
Ser Ser Gly Gly Leu Met Met Glu Gln Gly Glu Ile Lys Asn Cys Ser
35 40 45
Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala
50 55 60
Leu Phe Tyr Lys Leu Asp Ile Val Pro Ile Asp Asn Pro Lys Asn Ser
65 70 75 80
Thr Asn Tyr Arg Leu Ile Ser Cys Asn Thr Ser Val Ile Thr Gln Ala
85 90 95

<210> 2

<211> 34

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 2

Gly Glu Ile Lys Asn Cys Ser Phe Asn Ile Thr Thr Ser Ile Arg Asp
1 5 10 15
Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys Leu Asp Ile Val Pro
20 25 30
Ile Asp

<210> 3

<211> 93
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 3
Leu Lys Pro Cys Val Lys Leu Thr Pro Leu Cys Val Thr Leu His Cys
1 5 10 15
Thr Asn Leu Lys Asn Ala Thr Asn Thr Lys Ser Ser Asn Trp Lys Glu
20 25 30
Met Asp Arg Gly Glu Ile Lys Asn Cys Ser Phe Lys Val Thr Thr Ser
35 40 45
Ile Arg Asn Lys Met Gln Lys Glu Tyr Ala Leu Phe Tyr Lys Leu Asp
50 55 60
Val Val Pro Ile Asp Asn Asp Asn Thr Ser Tyr Lys Leu Ile Asn Cys
65 70 75 80
Asn Thr Ser Val Ile Thr Gln Ala Cys Pro Lys Val Ser
85 90

<210> 4
<211> 7
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 4
Glu Asn Leu Tyr Phe Gln Ser
1 5

<210> 5
<211> 7
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 5
Glu Asn Leu Tyr Phe Gln Gly
1 5

<210> 6
<211> 28
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 6
Ser Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr
1 5 10 15
Ala Leu Phe Tyr Lys Leu Asp Val Val Pro Ile Asp
20 25

<210> 7
<211> 23
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 7
Tyr Val Ser Asn Arg Gly Asn Arg Met Lys Arg Gln Asn Phe Leu Asn
1 5 10 15
Arg Tyr Ile Ile Ser Val Glu
20

<210> 8
<211> 30
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 8
Pro Lys Leu Cys Val Lys Leu Thr Pro Leu Cys Val Gly Ala Gly Ser
1 5 10 15
Cys Asn Thr Ser Val Ile Thr Gln Ala Cys Pro Lys Val Ser
20 25 30

<210> 9
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 9
Ala Ser Val Lys Leu Thr Pro Leu Cys Val Thr Leu Asn Ser Ile
1 5 10 15

<210> 10
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 10
Val Thr Leu Asn Cys Ile Asp Leu Arg Asn Ala Thr Asn Ala Thr
1 5 10 15

<210> 11
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 11
Ala Thr Asn Ala Thr Ser Asn Ser Asn Thr Thr Asn Thr Thr Ser
1 5 10 15

<210> 12
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 12
Thr Asn Thr Thr Ser Ser Gly Gly Leu Met Met Glu Gln Gly
1 5 10 15

<210> 13
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 13
Met Met Glu Gln Gly Glu Ile Lys Asn Cys Ser Phe Asn Ile Thr
1 5 10 15

<210> 14
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 14
Ser Phe Asn Ile Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu
1 5 10 15

<210> 15
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 15
Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys
1 5 10 15

<210> 16
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 16
Glu Tyr Ala Leu Phe Tyr Lys Leu Asp Ile Val Pro Ile Asp Asn
1 5 10 15

<210> 17
<211> 19
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 17
Lys Lys Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu
1 5 10 15
Phe Tyr Lys

<210> 18
<211> 14
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 18
Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr
1 5 10

<210> 19
<211> 8
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 19
Ser Thr Ser Ile Arg Gly Lys Val
1 5

<210> 20

<211> 17
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 20
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr
1 5 10 15
Lys

<210> 21
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<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 21
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr
1 5 10 15

<210> 22
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<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 22
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu
1 5 10

<210> 23
<211> 13
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 23
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala
1 5 10

<210> 24
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<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 24
Thr Thr Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr
1 5 10

<210> 25
<211> 15
<212> PRT
<213> Human immunodeficiency virus (HIV)

<400> 25
Ser Ile Arg Asp Lys Val Gln Lys Glu Tyr Ala Leu Phe Tyr Lys
1 5 10 15

<210> 26
<211> 13

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 26

Arg	Asp	Lys	Val	Gln	Lys	Glu	Tyr	Ala	Leu	Phe	Tyr	Lys
1				5					10			

<210> 27

<211> 12

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 27

Asp	Lys	Val	Gln	Lys	Glu	Tyr	Ala	Leu	Phe	Tyr	Lys
1				5				10			

<210> 28

<211> 365

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 28

Ala	Ala	Pro	Gly	Ser	Ser	Pro	His	His	His	His	His	Val	Tyr	Asn	
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Ile	Thr	Trp	Glu	Val	Thr	Asn	Gly	Asp	Arg	Glu	Thr	Val	Trp	Ala	Ile
						20		25		30					
Ser	Gly	Asn	His	Pro	Leu	Trp	Thr	Trp	Trp	Pro	Val	Leu	Thr	Pro	Asp
						35		40		45					
Leu	Cys	Met	Leu	Ala	Leu	Ser	Gly	Pro	Pro	His	Trp	Gly	Leu	Glu	Tyr
						50		55		60					
Gln	Ala	Pro	Tyr	Ser	Ser	Pro	Pro	Gly	Pro	Pro	Cys	Cys	Ser	Gly	Ser
						65		70		75			80		
Ser	Gly	Ser	Ser	Ala	Gly	Cys	Ser	Arg	Asp	Cys	Asp	Glu	Pro	Leu	Thr
						85		90		95					
Ser	Leu	Thr	Pro	Arg	Cys	Asn	Thr	Ala	Trp	Asn	Arg	Leu	Lys	Leu	Asp
						100		105		110					
Gln	Val	Thr	His	Lys	Ser	Ser	Glu	Gly	Phe	Tyr	Val	Cys	Pro	Gly	Ser
						115		120		125					
His	Arg	Pro	Arg	Glu	Ala	Lys	Ser	Cys	Gly	Gly	Pro	Asp	Ser	Phe	Tyr
						130		135		140					
Cys	Ala	Ser	Trp	Gly	Cys	Glu	Thr	Thr	Gly	Arg	Val	Tyr	Trp	Lys	Pro
						145		150		155			160		
Ser	Ser	Ser	Trp	Asp	Tyr	Ile	Thr	Val	Asp	Asn	Asn	Leu	Thr	Thr	Ser
						165		170		175					
Gln	Ala	Val	Gln	Val	Cys	Lys	Asp	Asn	Lys	Trp	Cys	Asn	Pro	Leu	Ala
						180		185		190					
Ile	Gln	Phe	Thr	Asn	Ala	Gly	Lys	Gln	Val	Thr	Ser	Trp	Thr	Thr	Gly
						195		200		205					
His	Tyr	Trp	Gly	Leu	Arg	Leu	Tyr	Val	Ser	Gly	Arg	Asp	Pro	Gly	Leu
						210		215		220					
Thr	Phe	Gly	Ile	Arg	Leu	Arg	Tyr	Gln	Asn	Leu	Gly	Pro	Arg	Val	Pro
						225		230		235			240		
Ile	Gly	Pro	Asn	Pro	Val	Leu	Ala	Asp	Gln	Leu	Ser	Leu	Pro	Arg	Pro
						245		250		255					
Asn	Pro	Leu	Pro	Lys	Pro	Ala	Lys	Ser	Pro	Pro	Ala	Ser	Val	Lys	Leu
						260		265		270					
Thr	Pro	Leu	Cys	Val	Thr	Leu	Asn	Cys	Ile	Asp	Leu	Arg	Asn	Ala	Thr

275	280	285
Asn Ala Thr Ser Asn Ser Asn	Thr Thr Asn Thr	Ser Ser Ser Gly
290	295	300
Gly Leu Met Met Glu Gln	Gly Glu Ile Lys Asn	Cys Ser Phe Asn Ile
305	310	315
Thr Thr Ser Ile Arg Asp	Lys Val Gln Lys	Glu Tyr Ala Leu Phe Tyr
325	330	335
Lys Leu Asp Ile Val Pro Ile Asp	Asn Pro Lys Asn Ser	Thr Asn Tyr
340	345	350
Arg Leu Ile Ser Cys Asn Thr	Ser Val Ile Thr Gln Ala	
355	360	365

<210> 29

<211> 9

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 29

Pro Cys Val Lys Leu Thr Pro Cys Val

1

5

<210> 30

<211> 12

<212> PRT

<213> Human immunodeficiency virus (HIV)

<400> 30

Ser Cys Asn Thr Ser Val Ile Thr Gln Ala Cys Pro

1

5

10

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